

DOCUMENT RESUME

ED 403 476

CE 073 495

TITLE Instructional Delivery.
PUB DATE 96
NOTE 23p.; In: Academy of Human Resource Development (AHRD) Conference Proceedings (Minneapolis, MN, February 29-March 3, 1996); see CE 073 480.
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143) -- Reports - Descriptive (141)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Administrator Role; Adult Education; Adult Educators; Classroom Techniques; *Distance Education; *Job Training; Labor Force Development; Managerial Occupations; Teacher Student Relationship; Teaching Methods; *Trainers

ABSTRACT

This document consists of three papers presented during a symposium on instructional delivery moderated by Larry Dooley at the 1996 conference of the Academy of Human Resource Development (HRD). "Distance Education: An Emerging Concept for HRD Programs" (Margaret R. Schlais et al.) examines various distance education methods, the current context--business and/or education--in which they are used, and the providers. "Issues in Using Managers as Instructors: The Qualitative Perspective" (Andrea D. Ellinger et al.) examines the issues that confront managers who adopt the role of instructor and the seven themes that emerged from the study: the configuration of the innovation (Manager-as-Instructor approach); roles and responsibilities of managers or role fit; time; concerns about adequacy to teach; manager-participant relationships; outcomes; and idea and alternatives. "Training Delivery Problems and Solutions" (Sandra K. Falkman, Richard A. Swanson) reports a study that surveyed trainers to identify common training delivery problems they experienced as novice trainers and then surveyed expert trainers to present successful strategies for dealing with the 12 training delivery problems. Expert solutions are provided for these problems: fear; credibility; personal experiences; difficult learners; participation; timing; adjust instruction; questions; feedback; media, materials, and facilities; openings and closing; and dependence on notes. Papers contain references. (YLB)

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SYMPOSIUM
[14] INSTRUCTIONAL DELIVERY
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Distance Education: An Emerging Concept for HRD Programs

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Issues in Using Managers as Instructors: The Qualitative Perspective

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Training Delivery Problems and Solutions

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Academy of Human Resource Development
1996 Conference
Minneapolis, MN
February 29-March 3, 1996

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Distance Education: An Emerging Concept for HRD Programs

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Many businesses and educational institutions are currently offering or preparing to offer distance education programs. This paper examines various distance education methods, the current context—business and/or education—in which they are used, and the providers.

Human Resource Development (HRD) professionals in today's education and business organizations face three challenging tasks: managing information-age outputs, paying more attention to customers, and spending less money doing it. For HRD academicians, accomplishing these tasks involves helping learners acquire more information in ways that require fewer resources from the learners, faculty, and institution. For HRD practitioners, accomplishing these tasks involves improving performance and learning in workplace settings that have ever-changing customer needs and technologies—and generally, diminishing budgets. To overcome the challenges, academicians are turning to distance education. Likewise, corporate and business training programs are also using distance education to make their programs more accessible and cost effective and to increase the timeliness of delivering new information (Portway & Lane, 1992).

Distance education can be defined as two-way communication between instructors and learners separated by geographical distance who use technology for the purpose of facilitating and supporting the educational process (Dooley & Greule, 1994). In more recent years, the concept of distance education has become associated with emerging technologies. Jones and Simonson (1993) defined distance education as a catch-all phrase for any form of instruction in which the learner and instructor were separated geographically and linked by telecommunication systems that permitted live, interactive audio and/or video exchanges. Given the broad definitions of distance education and the emerging technologies, HRD professionals have many delivery methods available from which to select.

Distance Education Delivery Methods

For this paper, distance education is defined to include both non-interactive and interactive methods. Typical delivery methods include correspondence courses, audio and videotapes, radio and television programs, satellite broadcasts, audio conferencing, two-way interactive videoconferencing, and computer conferencing (Cyrs & Smith, n.d.). Each method has strengths and weaknesses relative to instructional purposes and context, resources available for providing the learning, and needs of the audience. The following paragraphs overview five commonly used non-interactive distance education methods.

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Correspondence courses have been available for many years and are still widely used. Typically, this distance education method provides learners with all the course materials in printed form. Most correspondence courses are self-paced, allowing learners the freedom to move at their own rates through the courses. Often in academic settings, staff members from the correspondence office administer courses and answer learners' questions about procedure, limiting the instructor's role to one of answering content questions and grading completed work. Consequently, the learner is isolated from the instructor and other learners preventing any interaction (Van Kekerix & Andrews, 1991).

Audiocassettes are also used for distance education. Western Interstate Commission on Higher Education surveyed 344 public and private educational institutions and learned that 29% of the institutions used audiocassettes for off-campus instruction and 66% for on-campus instruction (Wilson, 1991). Wilson cited two advantages of this distance education method, lower costs and ease of use. In addition, he cited two disadvantages, the lack of visual presentation and limited student/teacher interaction.

Distance education has also been delivered via radio. For example, the University of Wisconsin developed the "University of the Air" program which allowed students to listen to college courses broadcast over the university's radio station. In contrast to this example, distance education via the radio tends to be more frequently used in developing countries (Wilson, 1991).

Cable television (CATV) systems offer another delivery method. Telecourse participants use televisions located in their homes or businesses to access classes or workshops. Participation in telecourses requires that the instructors and learners have access to CATV systems.

Another delivery method, microwave broadcasting can reach non-wired viewing sites. Sometimes called wireless-cable, this method is often used to broadcast pre-recorded instruction to viewers within a twenty mile radius. Microwave broadcasting is often a viable alternative for schools because it is cost-effective and easy to install. This method is actively used by higher education institutions, public broadcasting stations, and commercial operators (Douglas, 1993). Since both CATV and microwave broadcasts are usually pre-recorded, another advantage is that lessons can be re-broadcast several times for the convenience of learners. One disadvantage is that neither method allows for direct interaction with the instructor.

The limited interaction between learners and instructors is common among correspondence courses, audiocassettes, radio programs, CATV, and microwave broadcasting. However, recent technological advances have resulted in other delivery methods that overcome this limitation. The following paragraphs overview four interactive distance education methods.

The first method is satellite broadcasting which involves transmitting a television signal from a point of origin, through an encoder (uplink) to a satellite, then a satellite transponder strengthens the signal and transmits it to a decoder (downlink). Accompanying the video signal are two-way audio signals that are carried across telephone lines in a manner similar to audio or teleconferencing. The satellite networks being used today aid employers in sharing programs and information with each other and allow universities to send programs easily and directly to employer sites (Portway & Lane, 1992).

The second method, compressed video, is fast growing. It uses a digital television signal that takes up less space than the traditional analog signal, allowing for faster transmission of information. Wilson (1991) felt that compressed video would replace the current telecommunication systems as technology continued to develop and the price became more affordable. Satellite and compressed video methods have similar advantages. Both allow immediate interaction and feedback between instructors and students, as well as interaction between students at multiple locations. Another advantage is that both methods closely simulate a live classroom setting. Disadvantages of the methods include the high start-up and operating costs. Also with rapidly changing technology, systems may become quickly obsolete.

The third method is interactive video which synthesizes computer and video technology. This distance education method is capable of linking learners from various locations with an instructor via video cameras, desk mounted microphones, and television monitors (Schiller, 1993). Video material can be viewed in a traditional way or can be retrieved and mixed with

computer-generated text. Advantages include ease of use and the availability of two-way communication allowing for interaction and feedback. However, interactive video systems are expensive, complex, and time-consuming to design and construct (Jones & Simonson, 1993).

The Internet, the most expansive computer network in the world, is accessible from almost any computer (Schiller, 1993). Advantages include the capability to communicate worldwide using only a computer, modem, and telephone line. The Internet has resulted in new ways of accessing and disseminating information. For example, Penn State University is currently originating for-credit courses via the Internet (G. McLean, personal communication, December 14, 1995). Also, Henley Management College uses its computer communication system to allow their students to access data, exchange information, and take part in electronic conferencing (Henley Management College, 1995). A disadvantage of this delivery method is the lack of visual interaction between instructors and learners.

After reviewing the non-interactive and interactive methods, HRD professionals should realize that regardless of the methods used, the goal is to provide learners with the cost effective instruction that would otherwise be inaccessible (Meyer & Crawford, 1994). Since each method has different capabilities and limitations, matching the technology to the education and training needs may require mixed delivery methods (Portway & Lane, 1992). In mixing distance education methods, HRD professionals should be aware that educational institutions have been the primary context for non-interactive delivery methods while both businesses and educational institutions have been the context for interactive methods.

Distance Education Providers and Consortiums

In implementing HRD programs, HRD academicians and practitioners have multiple providers of distance education available which can be accessed as a resource. Colleges and universities have been on the forefront of providing distance education, both in credit and non-credit course offerings. Increasingly, business organizations are finding distance education programs to be a feasible instructional and information delivery method.

Some of the providers reported in the literature include:

1. AT&T has established an organization called the Center for Excellence in Distance Learning (CEDL) to investigate, develop, and demonstrate innovative applications of state-of-the-art telecommunication technologies. CEDL faculty work closely with university faculty, AT&T Bell Laboratories, and nationally recognized experts to research problems in distance education and to develop creative solutions. CEDL is the AT&T teleconferencing and distance education showcase for managing information in corporate training environments and traditional educational settings (Chute, Thompson, & Starin, 1994).

2. IBM and NEC jointly developed an Interactive Satellite Education Network (ISEN) in the 1980s. Some of the innovations introduced in this corporate training network, including compressed video and response terminals, are only now being widely applied in education (Portway & Lane, 1992).

3. Public Broadcasting System Adult Learning Service (ALS) established the Adult Learning Satellite Service to provide colleges, universities, businesses, hospitals, and other organizations with a broad range of educational programming. ALS helps colleges, universities, and businesses increase learning opportunities for distance learners; enrich classroom instruction; update faculty; train administrators, management, and staff; and provide educational services for local communities (Portway & Lane, 1992).

4. National Technology University (NTU), the leading provider worldwide of satellite delivered advanced technical education, is a cooperative effort of twenty-nine major engineering colleges. NTU offers courses to more than 230 sites, including corporations, government agencies, and colleges (National Technology University, 1995).

5. Mind Extension University (ME/U) uses cable television networks dedicated to distance education in bringing courses into the home (Green and Gilbert, 1995).

6. Educational Television Services (ETS) was established by Oklahoma State University's Telecommunication Center to encourage the use of distance education. ETS is equipped with a self-contained, instructor-controlled, classroom-style studio for videotaping courses and live two-way presentations via compressed video (Educational Television, 1995).

Table 1 shows some of the providers of distance education which can be utilized as a resource in implementing HRD programs as referred to in the literature.

Table 1. Methods, Context, and Providers of Distance Education as Reported in the Research

Methods	Context	Providers	References
Correspondence Courses	Education	Universities	Van Kekerix & Andrews, 1991
Audiocassettes	Education	Universities	Wilson, 1991
Radio Programs	Education	University of Wisconsin, Developing Countries	Wilson, 1991
CATV	Education	Penn State University, Mind Extension University	Green & Gilbert, 1995
Microwave Broadcasting	Education/Business	Universities, Public Broadcasting Stations, Commercial Operators	Douglas, 1993
Satellite Broadcasting	Education/Business	Public Broadcasting System Adult Learning Service National Technology University,	Portway & Lane, 1992, National Technology University, 1995,
Compressed Video	Education/Business	IBM and NEC, OSU's Educational Television Services	Jones & Simonson, 1993, Wilson, 1991, Portway & Lane, 1992, Educational Services, 1995
Interactive Video	Education/Business	AT&T's Center for Excellence in Distance Learning	Schiller, 1993, Jones & Simonson, 1993, Chute, Thompson, & Starin, 1994
Internet	Education/Business	Penn State University, Henley Management College	Schiller, 1993, McLean, 1995, Henley Management College, 1995

Consortiums have come into existence to provide high quality and economical distance education programs to learners. Affiliations have been formed among educational institutions, government agencies, corporations, and technological communities (International Network for Education and Technology, 1995). Most consortiums have the purpose of collaborating in the development and implementation of distance education.

There are several major consortiums currently in existence. These include:

1. A*DEC Distance Learning Consortium (A*DEC) is a national consortium of state universities and land grant institutions providing high quality and economical distance education programs and services via the latest and most appropriate information technologies (A*DEC Distance Learning Consortium, 1995).

2. International Network for Education and Technology (INET) is an independent, non-profit, Utah-based corporation that was established to act as a bridge or catalyst for productive cooperation between international businesses, educational, government, corporation and technological communities. INET seeks to demonstrate the effectiveness of collaborative efforts in the development of interactive educational training systems (International Network for Education & Technology, 1995).

3. Globewide Network Academy (GNA) is a global non-profit consortium of educational and research organizations. The goal of GNA is to improve education by creating a central marketplace for courses and offering administrative and technical services in support of on-line programs (Globewide Network Academy, 1995).

4. Ideanet is a consortium consisting of the Missouri School Boards Association, Northern Arizona University, Oklahoma State University, and Educational Service District 101, which operates Satellite Telecommunication Educational Programming. Ideanet provides five channels of educational programs, four for students at various levels, and one dedicated to professional development for educators (Shields, 1995).

Summary

As stated earlier, in today's education and business organizations, HRD academicians and practitioners face the integrated tasks of managing information-age outputs, paying more attention to customers, and spending less money doing it. By determining which distance education methods are available, who is using them, and how they are working in practice, HRD professionals can position themselves as informed consumers of these delivery methods. Further, knowledge of available consortiums can aid HRD professionals in creating distance education opportunities that will allow them to maintain or even increase the viability of HRD programs.

Because the field of distance education is still relatively new, few questions have been asked about effectiveness and even fewer have been answered. Systematic research is needed to understand how distance education will effect the field of human resource development and tomorrow's education and business organizations.

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This manuscript is based on a paper submitted in a HRD course and the following acknowledgment is given for assistance: Lucia Kafidi, Department of Agricultural Education, Communications, and 4-H Youth Development and Casey Moore, Department of Agricultural Education, Communications, and 4-H Youth Development.

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Issues in Using Managers as Instructors: The Qualitative Perspective

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Organizations that aspire to become learning organizations must encourage managers to adopt new roles as coaches, trainers and educators if learning is to become distributed and continuous at multiple levels within the organization. This paper examines the issues that confront managers who adopt the role of instructor.

The purpose of this qualitative research study was to support current collaborative research activities being conducted by The Ford Design Institute (FDI) and The University of Georgia's (UGA's) Department of Adult Education to assess the effectiveness of the "Manager-as-Instructor" approach to training within Ford Motor Company (Watkins, Valentine, Ellinger, Cseh, Bellinger, Barnas, Blum, 1996).

The Ford Design Institute implemented a top-down cascaded training approach in which technical managers serve as instructors for their respective subordinates. This process of using managers in a training capacity is referred to as the Manager-As-Instructor approach. This approach includes managers at senior technical management levels to technical non-management levels. The FDI and UGA project teams believe that there is much to learn and document relative to this type of delivery process within a business/industry environment. The overarching goals of this large scale research project include assessing the effectiveness and boundaries of this educational process. The smaller scale qualitative research project was designed to provide insight into the manager-as-instructor approach from the perspective of participating managers and trainees. It was anticipated that findings from this smaller scale study would aid in the survey development process for the manager questionnaire. Information obtained from telephone interviews during the course of this project resulted in the modification of the trainee questionnaire. This paper documents what has been found in previous research about managers as instructors, and reports the findings from the qualitative study.

There were four specific questions that guided this study:

1. What would improve this approach for both managers and trainees?;
2. Identify specific examples when it was appropriate that managers serve as instructors;
3. Identify specific examples when it was not appropriate that managers serve as instructors;
4. Identify any changes that have occurred as a result of the manager-as-instructor approach.

Previous Research on Using Managers as Instructors

The subject of managers as trainers, instructors, and educators is one that can incorporate many potential literature bases: organizational learning theory, management and leadership, training and human resource development, transfer of training, the learning organization, and innovation literature. For the purposes of this study, the relevant literature selected for inclusion reflects the literature associated with managerial roles and emerging roles within the learning organization.

Educational Dimensions of Managerial Roles. Evered and Selman (1989) acknowledge that "the 'manager' is viewed variously as a team captain, parent, steward, battle commander, fountain of wisdom, poker player, group spokesperson, gatekeeper, minister, drill instructor, facilitator, initiator, mediator, navigator, candy store-keeper, linchpin, umbrella-holder,

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and everything else between nurse and Attila-the-Hun" (p. 16). What managers and leaders do, how they respond, think and behave has been a central part of the literature on management, leadership and organizational behavior for several decades (Yukl, 1989). McLennan (1967) conducted a study of 520 managers in which he analyzed some of the skill components of managerial jobs. Respondents were presented with a checklist of 65 job related items that they rated on a Likert scale. The individual manager rankings were used to create an overall ranking with an indication of the degree to which the items were deemed necessary to the average managerial job. "Training subordinates" was ranked 12 out of 65 items and was considered extremely necessary in terms of the degree of its perceived importance.

Mintzberg (1990) describes the manager's job in terms of ten "roles," or "organized sets of behaviors identified with a position" (p. 168). He contends that formal authority and status give rise to three interpersonal roles (figurehead, leader, liaison), which give rise to three informational roles (monitor, disseminator, spokesperson). These two sets of roles enable the manager to play four decisional roles (entrepreneur, disturbance handler, resource allocator, negotiator). The leader role is largely reflective of the responsibility that managers have for the work of the people in their unit. He contends that the manager's actions in this regard constitute this role. Mintzberg asserts that "some of these actions involve leadership directly - for example, in most organizations the managers are normally responsible for hiring and training their own staff" (p. 168, italics ours). Drawing on Mintzberg, Watkins (1981) found that these roles also characterize management of an innovation. The leader, figurehead, entrepreneur and disturbance handler roles are more prominent. Additionally, the educative value of personal identification with the innovation ("I am the project") offers another window into why organizations might use managers as instructors when the outcome is organizational change. In a more recent article, Mintzberg (1994) attempts to integrate what we already know managers do around a framework of concentric circles. At the core are the person in the job, the frame of the job, and its agenda. These are surrounded by roles managers perform at three levels: managing by information, managing through people, and managing action, each carried out inside and outside the unit (p. 11). Managing through people, Mintzberg contends is a multi-level process. Managers lead on the individual level, "one-on-one." Managers "encourage and drive the people of their units - motivate them, inspire them, coach them, nurture them, push them, mentor them, and so on" (p. 19). Managers lead on the group level by building and managing teams, and ultimately they lead on the unit level, especially with regard to the creation and maintenance of culture. Managers as leaders often adopt some of the roles of trainer, mentor, and coach.

Yukl (1981) and his colleagues completed a four-year program of research in which they identified fourteen behavior categories of managers. In their follow-up research, five additional categories were added to their taxonomy for a total of nineteen behavior categories. The following categories of leadership behavior emphasize the educational roles of managers:

Praise-Recognition: The extent to which a leader provides praise and recognition to subordinates with effective performance, shows appreciation for their special efforts and contributions, and makes sure they generally get credit for their helpful ideas and suggestions.

Information Dissemination: The extent to which a leader keeps subordinates informed about developments that affect their work, including events in other work units or outside the organization, decisions made by higher management, and progress in meetings with superiors or outsiders.

Performance Emphasis: The extent to which a leader emphasizes the importance of subordinate performance, tries to improve productivity and efficiency, tries to keep subordinates working up to their capacity, and checks on their performance.

Training-Coaching: The extent to which a leader determines training needs for subordinates, and provides any necessary training and coaching.

More recently, Yukl (Yukl and Van Fleet, n.d., p. 156) proposed an integrating taxonomy with fourteen generic categories of behavior applicable to any leader or manager. This recent taxonomy of managerial practices redefines training-coaching behavior to developing and mentoring which equates to "providing coaching and career counseling and doing things to facilitate a subordinate's skill acquisition and career advancement" (p. 156). According to Kanter (1994), "a great way to develop future leaders is to rotate them through training roles and keep them active in teaching others, even while they pursue their other business responsibilities" (S42).

Emerging Roles of Managers in the Learning Organization. Senge's (1990) conception of the learning organization is one in which the leader assumes new roles and responsibilities. Senge characterizes the leader's new work as being a designer, teacher and steward. Senge suggests that leader as teacher "does not mean leader as authoritarian expert whose job it is to teach people the 'correct' view of reality" (p. 11). The leader as teacher is about helping everyone in the organization, including the leader, to gain more insightful views of current reality. This, Senge, says "is in line with a popular emerging view of leaders as coaches, guides, or facilitators" (p. 11). In short, Senge suggests that leaders in learning organizations are responsible for "building organizations where people are continually expanding their capabilities to shape their future — that is leaders are responsible for learning" (p. 9). According to Senge, (1990) the learning capabilities that matter are inseparable from the work that people do. Managers are typically more knowledgeable about organizational matters than trainers, so consequently, trainers often lack the credibility to assist in addressing complex issues that require substantive knowledge. Trainers typically do not have accountability for managing such processes so they normally lack the capability to help employees make needed changes. For these reasons, "managers," Senge asserts, "are the only people who can be truly effective in making learning happen" (p. S46). Given the magnitude of changes required to develop and promote organization-wide learning capabilities and continuous innovation, Senge (1994) questions why it would be assumed that training and development professionals would be solely charged with making organizational learning happen. Senge (1994) does not imply that the role of training and development personnel is eliminated in the learning organization. He suggests that trainers and developers have two important roles. The first involves helping managers to design learning processes because of their expertise in design and facilitation, and the second involves guiding the diffusion of new learnings. In the context of the learning organization, managers as trainers helps to achieve sustained organization-wide learning.

Several cases of exemplary global learning organizations which support Senge's contentions about managers roles in the learning organization are provided by Marquardt (1994). At Motorola, for example, executives act as instructors. Motorola's COO, William Weisz contends that managers must be visibly involved, as participants or instructors, because their involvement reflects what is truly perceived to be important by employees. At PPG, not only trainers, but also managers are responsible for learning and also do the training delivery. At Xerox, training in problem solving and quality improvement is delivered in "family groups" which consist of a manager and his/her subordinates. The manager is assisted by a professional trainer in the design and delivery of the training. During the training process, the group selects a project for the application of the quality process and tools. Following training, the manager guides the family group in the use of the quality process. The members of the family group, subsequently work with a professional trainer to provide training to their own subordinates. This method of training is referred to a training cascade.

Greenwood, Wasson and Giles (1993) suggest that middle managers play an important role as facilitators within the learning organization. Middle managers coach, counsel and empower their staff. Additionally, they design and deliver training. Greenwood et al. (1993) acknowledge that the spectrum of training is broadened in a learning organization to include multi-delivery modes and self-directed and managed learning. The cases illustrate that, in the rapidly changing global environment where organization-wide learning is an imperative, both managers and trainers have an important role in facilitating continuous learning and its use within the organization.

Methodology

The primary method of data collection was telephone interviewing. In July, 1995, we were provided with a randomly drawn sample of five managers and five participants from a member of the FDI research team. These five managers had been identified as having served in the capacity of instructors and the five participants had been identified as having taken a course using the manager-as-instructor approach. An eleventh manager was added to our sample, however, this manager was not randomly selected.

Although the remote location of Ford Motor Company in Dearborn, Michigan prevented us from conducting personal interviews, the telephone interviews, coupled with analysis of documents provided by FDI, have been our primary tools for investigation. We developed the

interview templates that were used for both managers and participants. Semi-structured interviews (Glesne & Peshkin, 1992) using the interview templates were conducted with this sample. The duration of the ten telephone interviews conducted ranged from 15 minutes to 30 minutes, with 4 of the 10 respondents completing the interview in 15 minutes and the remaining 6 completing the interview in 30 minutes. The telephone interviews were tape recorded with the permission of each respondent and transcribed verbatim. In addition to the transcriptions, field notes were taken during the course of each interview. To protect the confidentiality of each respondent, no references to gender or name were made. The respondent's were identified only by number. The numbering sequence of the respondents occurred in a random fashion.

The interview process began on July 11, 1995 and was concluded on August 10, 1995. Andrea interviewed ten of the eleven respondents identified by the random interview selection. As part of the interview process, both managers and trainees were contacted and a telephone interview appointment was made. A fax confirmation of the scheduled interview appointment was sent to each manager/trainee along with the appropriate interview template. This fax confirmation also identified the purpose of the study, requested their permission to tape record the interview and assured confidentiality. Following the interview, a thank-you note was faxed to each manager/trainee which again outlined the purpose of the study as well as reconfirmed our commitment of confidentiality.

For the purpose of this study, it is important to acknowledge the potential limitations of the telephone interviewing method that was used. Some of the limitations included the inability to personally establish rapport with respondents, the inability to observe facial expressions and body language, and to observe voice inflections and changes in tonality with body language.

Initially, data analysis involved using open coding (Strauss, 1987). Each transcript was read and initial impressions were recorded. Subsequently, specific portions of the transcripts were highlighted as similarities were found in the data. A cross-case analysis (Patton, 1990) was considered because the data had been structured in a question format that could be compared across managers, across trainees or across combined responses; however, we chose not to use this type of analysis. We concluded that analyzing the data in the question format might not allow the data to speak freely and our findings might be constrained by our initial questions. After initial reading and preliminary coding, we reviewed the transcripts again to determine if our initial coding scheme captured the "recurring regularities" (Patton, 1990) that we saw emerging in the data. Axial coding is an aspect of open coding and consists of "intense analysis done around one category at a time in terms of the paradigm items" (p. 32). After several readings, our open coding resulted in the creation of seven themes. Selective coding (Strauss, 1987) occurred after open coding in which additional codes as they related to core codes (themes) were examined.

Findings

Seven themes emerged from the qualitative data set. These themes are: the configuration of the innovation (the Manager-As-Instructor approach); roles and responsibilities of managers or role fit; time; concerns about adequacy to teach, manager-participant relationships, outcomes, and ideas and alternatives. Each theme is subsequently discussed.

Hall and Hord (1984) offer a model, the Concerns-Based Adoption Model (CBAM) which is an empirically based framework that outlines the developmental processes that individuals experience as a new innovation is implemented. Two diagnostic dimensions, concerns and behaviors, are associated with the way individuals change as they become familiar with the innovation. Hall and Hord (1984) identify seven stages of concern and eight distinct levels of use that are associated with the individuals comfort level in the adoption of the innovation and their skillfulness in using the innovation. A third diagnostic dimension, innovation configurations, defines the nature of the innovation being implemented. Innovation configurations refer to the various forms of an innovation that result when the individual users of the innovation adapt it for use in their particular situations. Based upon this model, the first theme that emerged within the data set was the variation of how the innovation, the use of managers as instructors, was adapted in practice by the managers. This was characterized as the theme of the *configuration of the innovation* (Hall and Loucks, 1978). According to the data, some managers delegated the instructional activities to others, and some managers adapted the course materials to their audiences

to more closely align the course to the environment in which the materials would be used. The following excerpts from the transcripts illustrate this theme.

"...In fact, there are some managers who delegated the thing and simply stood pat and said that my priorities are such that I will not do this. I've got products to build and products to design and there are just other things far more pressing than this kind of thing...we'll have to get it done some other way and no thank you...and although those instances have been rare, they're there certainly" [M2].

"Now the thing that has helped is the extra freedom that we provided a little later on when we were rolling out the first course of tailoring the course to your own environment. There is a lot of material there and you can take as much as two days, generally a day and one half to go through it all. But if you tailor them to your environment, including only the things that you think your particular audience is interested in but doesn't know about...that helps an awful lot" [M2].

These findings suggest that the delivery process associated with the implementation of this approach may be inconsistent with the original intentions of the developers of this cascaded approach. Variations in implementation have been associated with variations in outcomes. From this theme, we might predict that the innovation configuration will vary from ideal, to acceptable, to unacceptable variations. If this is true, then it would be important to be able to differentiate between responses of users who actually experienced the innovation as intended from those who did not. Further, Hall and Hord (1984) note that "If the innovation is perceived as inappropriate, it is likely to be used with less commitment" (p. 345). Measures which determine whether or not users support the underlying rationale for the innovation would help differentiate between those who implemented the innovation incorrectly due to lack of understanding as compared to those who did so due to disagreement for the underlying premises. Emrick and Peterson (1978) found that individuals who were not positively disposed toward the innovation also had lower learner achievement.

The next theme were the *roles and responsibilities*, or more precisely, managers' sense of role fit with serving as an instructor. Of the five managers, two indicated that they viewed serving as an instructor as an additional assignment to their current job responsibilities. Two others suggested that instructing was an integral part of his/her job as a manager. One manager indicated that FDI should conduct the training. The following excerpts illustrate this theme:

"Well, I think the most important thing that would help me or help the other people that are trying to do this is to have management recognize it as an integral part of their job and have the individual also recognize that it is integral to their job" [M8].

"I feel very strongly that one of management's responsibilities is to be a teacher...that teacher can either be formal, informal or casual. I think the quicker that we all tumble to the fact that we're here to teach people and to counsel people and to instruct people, the quicker we'll be in the mode we need to be in..." [M8].

"...So teaching introductory-type courses like this first one is probably OK but I'm not in favor of teaching higher level courses..." [M9].

"...I want to say I did an OK job, but to do a better job, I should have spent more time preparing. But with our current positions, this is just an added assignment" [M7].

Consistent with this theme of the apparent disparity about managerial roles were the different assumptions about the business Ford was in – "we need to stick to our business and our business is making cars" contrasted with "the business we're in is people, not mechanics...and we need to take more responsibility for the people in the business and instruction and teaching is a very big piece of that" [M4]. Leadership research has long contrasted a production vs a people orientation among managers, but this research suggests that this contrast may be a highly significant explanation for differences in how managers responded to the role of instructor.

The notion of *time* was a central theme within the data set. Time included not having enough time to prepare for instruction and not having enough time for this added assignment. This participant suggested that *"...I think that in the current state of my company, free time...the time available for a manager to be properly trained is simply not there...I don't think that it is a bad idea conceptually, I think it's just the practical implementation of it requires too much time for the trainer to be trained that is simply not available" [P9].* Time was also described as a smokescreen, or an excuse that there is never enough time to do the job at Ford. One respondent characterized time in terms of priorities: *"I think that it is a matter of priorities...in other words, if*

you feel it's really important to teach and coach and relate to your people in a more effective way, then you are going to make that a priority and you're going to find time to do it and maybe you might not have time to do something else...but I think it comes back to what are priorities really should be..." [M5].

The contrast noted here is consistent with Stage of Concern (Hall and Hord, 1984) research which suggests that individuals who have not yet adopted an innovation (the Self Stage of Concern) are more likely to talk in terms of future time—imagining what the time costs will be and comparing this to other demands on their time. Individuals at early use (the Task Stage of Concern) are more likely to be concerned about the time it takes to actually use the innovation, i.e. time to prepare, time to learn more about using it, time going from awkward, canned use to more skillful use, etc. This contrast between self and task concerns is evident here and is a fruitful area for further exploration.

Several comments made by managers and participants revealed the related theme of *concerns about adequacy to teach*. Concerns articulated included the lack of appropriate pre-training support and the requisite skill sets of managers to provide the instruction. As one instructor put it: *"...because most of us are line managers, we're not professional instructors it would be nice to have some sort of at least brief training on the do's and don'ts and how to gauge your audience and how to physically do it..."* [M8]. One manager suggested that fear of instructing or fear of not doing well in an instructional capacity may have been the underlying concern that was depicted as a factor of time. Some managers wanted to know what their peers thought about this approach.

Participants noted a lack of post-training follow-up: *"...it was a good class....I guess it's just unfortunate that there was not follow-up on it...there was no further discussions and subsequent discussions and subsequent projects as to how we can try and involve robustness....it was a disappointment that it was talked about and then it was basically dropped kinda treated as a requirement you have to teach this class, and then it was taught, and that was the last thing that was done with it....so our work really was not directly influenced by it at all...it was just something we needed to do to be in tune with the way the company is changing in the other engineering organizations....so we weren't directly impacted or affected."* [P10]. This participant did not see a connection between the way the company is changing and the way he/she would need to change. Taking personal initiative to follow-up does not seem to have occurred to at least this participant. Another area to explore was managers' knowledge of their role beyond the classroom and participants' definition of their responsibilities for learning and using the concepts.

Manager-participant relationships emerged as a theme. Many managers alluded to having good, open working relationships with their subordinates. From that standpoint, despite inconsistencies about whether instructing was an appropriate role, outcomes were generally perceived to be positive. Rapport, credibility and respect were mentioned by some managers. For example: *"...well as an instructor of my own folks...I started out with rapport...they know me and I know them...and by having that already established we could deal very frankly with issues of whether we should cover this material in depth or whether we should move on and proceed a little faster...Now questions came up about the material or about where things are headed that I could answer frankly knowing their backgrounds, their levels of interest and their understanding...a hired hand...an actor familiar with this material teaching from rote couldn't bring that to the party at all..."* [M2]. When some managers indicated that time was a premium and their preparation somewhat compromised, the relationships with their subordinates intervened to make the training experience productive. Those managers who viewed instructing as an integral role reported the strength of their relationships as a factor in their success. Some trainees suggested that poor relationships negatively impacted the training experience and outcomes. One trainee said *"...so I have noticed nothing that has happened as a result of him teaching the class, noticed really nothing in any other ways since his management style is basically hands-off. He really doesn't interface very much with the people in the office so I haven't noticed anything as a result of him teaching the class."* [P10]. When this trainee was asked if he/she would feel differently about the manager providing instruction if his/her manager had a better working relationship with his/her subordinates, this was the response: *"Absolutely....it then becomes more of a team effort because every team has a coach and if you think about sports...all the great teams have great coaches and the coaches always get along with their players...but when you have a team that has a coach and the team hardly ever interfaces with the coach then chances are you're not going to have a very successful team...and when the coach tries to tell the players things and the players perhaps don't*

have a great deal of respect or don't have a good relationship with the coach, it's not as effective" [P10]. Another manager commented, "I gained a greater awareness of their perspectives and they mine so as a result I think we had a better communication and team work..." [M5]. One manager shared this comment as a result of providing instruction: "...you have much better credibility with the folks when they know you are a part of them rather than some figure sitting in the corner. It's gotten me much closer to my people" [M8].

Respondents also described a number of outcomes of this change, particularly with respect to use of the material in their work. Managers identified outcomes associated with team building, use of the subject matter in practice, increased personal knowledge and stronger relationships, and trainees thought that the manager as instructor approach benefited to the classroom environment. Both managers and trainees alike were not able to use the subject material, or suggested that the concepts associated with robustness were "need to know," but not "need to do." Comments from both managers and trainees relative to perceived outcomes included:

"So I used it (robustness) right away and that was really neat and haven't used it since..." [P3].

"I think it's critical that if you are teaching in your own area you can personalize the data....if you have a paid professionals up there or a consultant up there often they talk about the same things but they talk about them in non-relevant terms or abstract terms....so I think it's very important that we as the line management are involved because we can go and give examples...give experiences...give personal anecdotes that touch and feel the organization rather than some just mechanical example that really is intellectually important but is probably not socially relevant." [M8].

"...during the training material, people would ask well where are we gonna use that in our job...in our department and we could elaborate on upcoming designs ...and I see that happening off and on in our design process now..." [M7].

"...but I think that the awareness that we're after robust design and thinking of all the different factors that your product could be driven in ... is in the back of my engineers' heads more now because of that initiative..." [M7].

"I would think that just the fact that we all together took the course at the same time and had part of the interface and discussions even during the course were about specific problems, we were all working on as a team so I think that it came through further on in the program" [M4].

Overall, nine of ten respondents indicated that the outcomes of using managers as instructors were positive. Responsibility for continuing use and reinforcement of use was somewhat inconsistent between managers and trainees. This is a significant area to explore.

The final theme that emerged, *ideas and alternatives*, represents the comments and suggestions that were provided by both managers and participants when asked to consider changes to this approach. Some ideas and alternatives included providing training to managers on how to be more effective trainers, and providing a model of what the training should have looked like prior to being cascaded within the organization. Other suggestions included co-teaching, or the use of more relevant and specific materials applicable to diverse situations. Finally, one manager noted that more involvement by managers in designing the program could make it more effective:

"...a critical thing....you know it's a heck of a time to bring this up...the train is already underway here, the ship has left the port...but a critical thing we didn't do that is so important in developing any kind of product...whether it is an offering of materials through coursework or the sale of a vehicle is to get the customer involved... what I feel is that we made a drastic mistake in not getting them involved in the early stages during course development....we're reaching out and trying to present a message here in North America to about 14,000 engineers and we didn't [ask] any of them... what do you think of this stuff....I guess that 's the strongest thing I feel about this whole business..." [M2].

Conclusions

In summary, these seven themes provide useful insights about this approach from the perspectives of those who served in an instructional capacity and those who experienced the cascaded training delivery. Overall, what have we learned about the innovation of using managers as instructors? From this preliminary snapshot, we were able to determine that the reception to the approach was consistent with what we would expect to find in the early stages of an innovation implementation

process and that there are differences in perception and support for the innovation. What remains to be seen is whether or not the differences between managers who must use the innovation and participants who receive the innovation will either greatly alter the innovation or kill it. Captured in these themes is the fact that the manager is much more affected by this change since he or she must take on a new and challenging role, one which has the potential to alter their relationship with their subordinates. As the individuals with the most power in the organization, their voice is likely to be stronger. Areas explored in further research included determining the interrelationship between support for the innovation, role fit, and concerns about the innovation among managers; and the interrelationships between extent of use of the knowledge taught by the manager and the configuration of the innovation among participants (Watkins, K., Valentine, T., Ellinger, A., Cseh, M., Bellinger, L., Barnas, C. and Blum, D., 1996).

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Training Delivery Problems and Solutions

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The authors surveyed 371 trainers who were asked to recall training delivery problems or difficulties they experienced as novices. The analysis of their 1,098 responses conclude that novice trainers faced 12 common training delivery problems. Twenty expert trainers were subsequently surveyed and asked to present successful strategies for dealing with the 12 training delivery problems. The analysis of their responses concludes with a synthesis of the common training delivery problems experienced by novices and the experts' advice on how to solve these problems.

The training of employees at all levels has taken on a significant role in industry and business. Rapid technological advances in the workplace and the corporation's concern for profit in today's marketplace drive the emphasis on training employees. When properly used, training increases both the effectiveness and efficiency of employees (Swanson, 1992). Within this framework and with all the advances in instructional technology, instructor-led training still remains the most popular method of delivering training, year after year, according to Lakewood Research's annual census.

Most beginning trainers are not graduates of programs specifically designed to train trainers. They are generally subject matter experts in their organizations and have good communication skills. Their preparation to deliver training often follows a "see and do" model. That is, they observe the course in preparation to deliver it and then they teach the course to other employees in a similar manner to what they observed.

Criticism of the training profession has included the lack of research about the processes used to select instructors, the evaluation methods used to rate the instruction, and the evaluation methods used to rate the instructor (Swanson, 1982). As training in industry and business continues to increase, the body of knowledge possessed by expert professional trainers will need to be captured and shared with more employees in organizations (Jacobs, 1992).

Purpose of the Study

Little has been written about the ways in which expert trainers handle specific training delivery problems in the training classroom. Proven and practical techniques for dealing with specific training delivery problems would help novice trainers.

There were three purposes for this research: (a) to determine the difficulties novice trainers experience during the delivery of training, (b) to gather reports from experts on how they handle such situations, and (c) to synthesize this information into a useful aid that defines the training delivery problems and provides specific solutions.

Overview of the Literature

Training and development has grown dramatically during the past three decades. It has become a 30 billion dollar profession. Each year, 15 million employees participate in 17.6 million courses. One out of every eight American workers attends a formal training course every year (Chakiris & Rolander, 1986). Furthermore, more employees each year are finding themselves in the role of trainer without having adequate preparation.

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The burden for understanding and mediating the organization's desire for expertise and the learner needs is ultimately left on the trainer's shoulders (Yelon, 1992). The research on training adults in the workplace typically focuses the needs of the organization (Sleezer, 1992) and the learner (Knowles, 1984). Much less is known and said about the specific problems facing the novice trainer and their role in delivering instruction. Instructor skills are the skills needed by a trainer when using structured learning events, such as group discussions, presentations, role plays, and case studies. These skills also include assessing learners' needs, using media and materials, administering exams or instruments, and providing feedback to participants (McLagan, 1983).

General models of training and learning are important to the profession as are the problems that threaten and discourage practitioners. At the general level, Knowles (1984) suggested that four concepts can be used to think about adult education: (a) the self-concept of the learner, (b) the learner's experience, (c) the learner's readiness to learn, and (d) the learner's perspective of time. Smith's (1983a, 1983b) more specific review and synthesis of the instruction literature identifies those variables that affect training and that the trainer can control. They include: objectives, content structure, instructional sequence, rate of delivery, repetition and practice, knowledge of results, and reinforcement and rewards.

Furthermore, the selection of instructional approaches depends on many criteria, such as conditions of learning, content, and characteristics of the students. Gagne specifically cites nine variables (1987): Gain attention, Inform the learner of the learning objectives, Stimulate the recall of prerequisite learning, Provide learning guidance, Elicit performance, Provide feedback about performance correctness, Assess performance, and Enhance performance and transfer.

Zemke and Zemke (1988) have further defined the specific needs of adult learners. The following are some examples: (1) In a classroom training situation, it is important that the environment be comfortable, both physically and psychologically; (2) Trainers must understand the participants' expectations of the course, because the self-concepts of the participants are involved, and (3) By serving as a facilitator or orchestrator, the effective instructor can manage the classroom by allowing participants to share their experiences and knowledge, can integrate new knowledge, and can provide strategies that will allow transfer of learning back to the job.

Clearly, the job of instructor is complex. And, while general instruction theories abound, the bulk of the practitioner training delivery advice in the literature is not grounded in research (see Pike, 1989). From the literature it is difficult to cull out the common training delivery problems and expert solutions to those problems being faced by novice trainers.

Methodology

The general methodology of the study involved surveying novice trainers and expert trainers. The novices identified their training delivery problems and the experts provided solutions to those problems. An overview of the general research methodology for this study is: (1) Survey trainers to determine the most frequent training delivery problems that novice trainers experience. (2) Analyze survey data and synthesize results into 10-15 major delivery problems, (3) Identify experts to respond to major training delivery problems experienced by novice trainers, (4) Survey the training experts through a questionnaire as to how they handle the identified training delivery problems, (5) Prepare job aids listing the training delivery problems, general solutions, and specific solutions, and (6) Prepare final report.

Survey of Novice Trainers

A questionnaire was developed to determine the training delivery problems most frequently encountered by novice trainers. Questions covered basic demographic information and problems the respondents encountered during their first two years on the job. The following open-ended question was used:

As a beginning trainer, what problems or difficulties did you encounter during the delivery phase (or presentation) of training. Please be specific and feel free to use the other side of this questionnaire.

The first draft survey questionnaire was pilot-tested with twenty-five students in a University of Minnesota graduate-level training class and then revised.

The final questionnaire was then sent to the 984 members of the Southern Minnesota Chapter of the American Society for Training and Development. Of the 984 forms that were mailed, 420 (43%) were returned. Some of the returned forms were unusable for various reasons (e. g., blank, problems not listed, returned too late, etc.). The 371 (38%) usable questionnaires provide the data for the analysis. A list of 1,098 training delivery problems was derived from the 371 usable questionnaires.

Each of the 1,098 training delivery problems was printed on a note card and sorted into categories. The method used for sorting the data is known as the KJ Method: Affinity Diagrams (Mizuno, 1988). This method, developed by Kawakita Jiro of the Kawakita Research Institute, is used to analyze data that are elusive, confusing, and disorganized. Groupings are made by mutual affinity of the data. The process has seven steps: (1) Choose a theme, (2) Collect the data, (3) Put data onto cards, (4) Sort the cards into categories, (5) Label the cards, (6) Draw the diagrams, and (7) Present the data.

Essentially the technique is a right-brain process (Mizuno, 1988). Those involved in the sorting were directed to use their intuition and creativity to interpret and group the data, as opposed to sorting by rigid analysis and reasoning rules. Nine people were involved in the sorting process—two University professors, six graduate students, and one professional trainer. The four sorting teams worked in three pairs and one triad. Each expert team, A through D, was given one fourth of the cards. In their A, B, C, and D teams the cards were read slowly, once or twice. Cards that contained similar ideas were grouped together on the basis of their affinity or commonality. After the cards had been grouped, the groups were labeled. The label consisted of words written on a blank card that conveyed the meaning of the cards in that group. The labeled groups of cards are then treated as a single card (Mizuno, 1988).

The twelve training delivery problems fell into three basic categories: (a) those pertaining to the trainer, (b) those describing how the trainer relates to the trainees, and (c) those pertaining to presentation techniques.

Selection of Experts

A variety of distinctions can be drawn between novices and experts. The major differences are intellect and experience. Because experts have a broader knowledge base than novices, they solve problems in a different manner. Experts have more focus, recognize cues that allow them to recall "chunks" of information, and are better able to integrate and interconnect knowledge. The knowledge that novices possess may be descriptive at a superficial level. In contrast, experts are able to troubleshoot and make interpretations about information. By using cues to access the stored knowledge they possess, experts are able to assess the situation at hand and devise an action plan that will work effectively (Thomas, 1988).

The goal of this aspect of the project was to establish a list of such experts in the field of training, specifically those who had distinguished themselves through their outstanding delivery skills. Once identified, these experts were presented with a list of the twelve most common training delivery problems faced by novice trainers as identified through the first survey. The experts were asked to respond to the problems with specific techniques they use to overcome similar problems during training presentations.

The potential experts were to be practitioners having a minimum of two years of experience and recognition by either colleagues or academicians as successful trainers. A nomination form was sent to the eight officers of the Southern Minnesota Chapter of the American Society for Training and Development to obtain names of experts. The twelve-member Training and Development Faculty at the University of Minnesota were also asked to nominate experts. Both groups were sent an identical form on which they were asked to nominate up to six people whom they considered to be expert "deliverers" of training. They were asked to provide the company name, address, and telephone number of the nominees. Three association officers responded and provided 15 names. The survey of the university faculty produced six (6) responses and 28 names. The total of 43 names was reduced to 36, because of duplication.

Survey of Experts

Questionnaires were sent to the 36 people who were identified as experts in delivering training. They were asked to respond to the twelve training delivery problems that had been identified as problems for novice trainers in terms of how they handle these problems.

Twenty (56%) surveys were returned. Most of the experts responded in detail to all of the questions. These responses were typed and sorted into categories. Similar responses were grouped using the KJ Method. The three or four solutions that appeared most frequently for each difficult training situation became the basis for the final list of solutions from the experts.

Analysis of Data

The primary data analysis revolved around the 1,089 training delivery problems of novice trainers collected through the survey questionnaire. A composite list of 12-15 general training delivery problems had been compiled when the four teams of experts had finished sorting their portion of the problems according to the KJ Method. Enroute, each team wrote its list on a chalkboard, explained the problems to the other teams and defended the rationales behind the problems. A matrix was developed to synthesize the topics into twelve training delivery problems.

The final list that emerged contained the summarizes the training delivery problem information collected by the first survey. The purpose of the first survey was to determine the major delivery problems of beginning trainers. The synthesis of this analysis is resulted in the "Twelve Most Common Training Delivery Problems of Novice Trainers."

The purpose of the second survey was to have experts propose solutions for handling these problems. It resulted in the "Expert Solutions To The Twelve Most Common Delivery Problems of Beginning Trainers." Essentially, it is a topical outline that synthesizes the solutions from the 20 experts against the 12 training delivery problems that novices experience. The combined data from the two surveys is presented in Figure 1.

Figure 1. Expert Solutions* to the Twelve Most Common Training Delivery Problems of Novice Trainers

1. **FEAR**
 - A. Be well prepared. Expert trainers have a detailed lesson plan, understand the material, and practice their presentation.
 - B. Use ice breakers. Experts use ice-breakers and begin with an activity that relaxes participants and gets them to talk and become involved.
 - C. Acknowledge the Fear. Experts understand that fear is normal, confront what makes them afraid, and use positive self-talk or relaxation exercises prior to the presentation.
2. **CREDIBILITY**
 - A. Don't apologize. Experts are honest about the subject matter and explain that they are either experts or conduits.
 - B. Have an attitude of an expert. Experts are well prepared and well organized. They listen, observe, and apply what they know to what the participants know.
 - C. Share Personal Background. Experts talk about their areas of expertise and the variety of experiences they have had.
3. **PERSONAL EXPERIENCES**
 - A. Report personal experiences. Experts tell their personal experiences, sometimes asking themselves probing questions to uncover them
 - B. Report experiences of others. Experts collect pertinent stories and incidents from other people and/or have participants share their experiences.
 - C. Use analogies, movies, or famous people. Experts use familiar incidents or situations in order to relate to the subject.
4. **DIFFICULT LEARNERS**
 - A. Confront problem learner. Experts use humor. They may also talk to the individual during a break to determine the problem or to ask the person to leave.

- B. Circumvent dominating behavior. Experts use nonverbal behavior, such as breaking eye contact or standing with their backs to the person and inviting the others to participate.
 - C. Small groups for timid behavior. Experts find that quiet people feel more comfortable talking in small groups or dyads. They structure exercises where a wide range of participation is encouraged.
5. **PARTICIPATION**
- A. Ask open-ended questions. Experts incorporate questions into the lesson plans and provide positive feedback when people do participate.
 - B. Plan small group activities. Experts use dyads, case studies, and role plays to allow people to feel comfortable, to reduce fears, and to increase participation.
 - C. Invite participation. Experts structure activities that allow people to share at an early time in the presentation.
6. **TIMING**
- A. Plan Well. Experts plan for too much material, and some parts of the material are expendable. They prioritize activities so that parts may be deleted, if necessary.
 - B. Practice, practice, practice. Experts practice the material many times so they know where they should be at 15-minute intervals. They make sure there's a clock in the training room.
7. **ADJUST INSTRUCTION**
- A. Know group needs. Experts determine the needs of the group at an early time in the training and structure activities and processes based on those needs.
 - B. Request feedback. Experts watch for signs of boredom and ask participants either during breaks or periodically during the session how they feel about the training.
 - C. Redesign during breaks. Experts find it helpful to have contingency plans and, if necessary, to redesign the program during a break. Redesigning during delivery is not advocated.
8. **QUESTIONS**
- Answering Questions:**
- A. Anticipate questions. Experts prepare by putting themselves in the participant's place and by writing out key questions learners might have.
 - B. Paraphrase learners' questions. Experts repeat and paraphrase participants' questions to ensure that everyone has heard the question and understands them.
 - C. "I don't know" is okay. Experts redirect questions they can't answer back to the group's expertise. They try to locate answers during breaks.
- Asking Questions:**
- A. Ask concise questions. Questions are a great tool for experts. They ask concise, simple questions and provide enough time for participants to answer.
9. **FEEDBACK**
- A. Solicit informal feedback. Experts ask participants, either during class or at the break, if the training is meeting their needs and expectations. They also watch for nonverbal cues.
 - B. Do summative evaluations. Experts have participants fill out forms at the conclusion of training to determine if the objectives and needs of the group were met.
10. **MEDIA, MATERIALS, FACILITIES**
- Media:**
- A. Know equipment. Experts know how to fully operate every piece of equipment that they use.
 - B. Have back-ups. Experts carry a survival kit of extra bulbs, extension cords, markers, tape, etc. They also bring the information they are presenting in another medium.
 - C. Enlist assistance. Experts are honest with the group if there is a breakdown and ask if anyone can be of assistance.

Material:

- A. Be prepared. Experts have all materials ready and placed at each participant's workplace or stacked for distribution.

Facilities:

- A. Visit facility beforehand. Experts visit a new facility ahead of time, if possible, to see the layout of the room and to get an idea of where things are located and how to set up.
- B. Arrive early. Experts arrive at least one hour in advance to ensure enough time for setting up and handling problems.

11. **OPENINGS AND CLOSINGS****Openings:**

- A. Develop an "openings file." Experts rely on the many sources for ice-breaker ideas. Through observation and experimentation, they develop ideas and keep a file of them.
- B. Memorize. Experts develop a great opening and memorize it.
- C. Relax trainees. Experts greet people as they enter, take time for introductions, and create a relaxed atmosphere.

Closings:

- A. Summarize Concisely. Experts simply and concisely summarize the contents of the course, using objectives or the initial model.
- B. Thank participants. Experts thank participants for their time and their contributions to the course.

12. **DEPENDENCE ON NOTES**

- A. Notes are necessary. Experts recognize that no one completely outgrows the need for notes.
- B. Use Cards. Experts scale down their presentations to an outline or key words, which they write on note cards to use as prompts.
- C. Use Visuals. Experts make notes on frames of transparencies and on their copies of handouts.
- D. Practice. Experts learn the script well so that they can deliver it from the keyword note cards.

*Based on a survey of 371 novices and 20 experts.

Summary and Conclusions

This study had three major focuses: (a) to determine what trainers considered to be the most frequent training delivery problems they faced as novices, (b) to determine how experts respond to these problems with solutions they have found to be effective, and to (3) present the findings in a useful manner for practitioners. The conclusions from each of the two distinct surveys within the study formed the research base for the major outcomes— the 12 most common training delivery problems novice trainers experience and expert solutions to these problems.

While advice and speculation abounds about best practices in training, little research is available about the practical problems novice trainers face. Other novice trainer problems should be researched following the general methodology of this study. They should pursue a specific and/or narrow frame of questions and use of open-ended questions which will likely result in the excellent response from both novices and experts. The resulting researcher's problem of dealing with large pools of qualitative data is lessened with new analysis methods such as the KJ Method.

Given the theory-to-practice gap that haunts the training profession, the general novice-expert methodology used in this study may be helpful in closing that gap.

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